



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

**A list of the North American species of the genus ANTHOPHORA,
with descriptions of new species.**

BY E. T. CRESSON.

The species known to me may be recognized by the aid of the following table :

Abdomen with white marginal fasciæ :

Thorax and base of abdomen with ochraceous pubescence :

Terminal joint of middle tarsi of ♂ ciliated laterally ; clypeus with two black spots at base.....**Walshii**, ♂ ♀.

Terminal joint of middle tarsi of ♂ simple ; clypeus with only a short black line on lateral suture.....**Smit'ii**, ♂ ♀.

Terminal joint of middle tarsi of ♂ simple ; hind legs swollen and basal joint of their tarsi toothed within.....**californica**, ♂.

Thorax and base of abdomen with sooty, or mixed black and white, pubescence.....**marginata**, ♀.

Abdomen subfasciate with pale pubescence :

Thorax and base of abdomen with dense ochraceous pubescence.....**montana**, ♀.

Thorax and abdomen with thin pale or yellowish pubescence, tip of abdomen with fulvous pubescence ; basal joint of hind tarsi simple..**terminalis**, ♂ ♀.

Abdomen not fasciate :

Thorax and first segment of abdomen with a hoary pubescence, middle tarsi long, ciliated with fulvous, and terminal joint with black pubescence ; basal joint of hind tarsi simple.....**ursina**, ♂.

Thorax and first segment of abdomen with a dense ochraceous pubescence ; rest of abdomen shining, almost nude ; first recurrent nervure entering second submarginal cell at tip.....**floridana**, ♀.

Thorax and first segment of abdomen, more or less, with a pale ochraceous pubescence ; rest of abdomen dull, with short black pubescence ; first recurrent nervure entering second submarginal cell in middle ; basal joint of hind tarsi of ♂ with a blunt tooth within.....**abrupta**, ♂ ♀.

Thorax, and first and base of second segments of abdomen with lemon-yellow pubescence ; vertex and occiput with black pubescence ; basal joint of hind tarsi of ♂ toothed within.....**canadensis**, ♂.

Thorax, and the first and second, and sometimes the third segments of abdomen with whitish pubescence ; the basal joint of hind tarsi of ♂ toothed within.....**bomboides**, ♂ ♀.

Entire body covered with a short, dense, bright yellow pubescence ; basal joint of hind tarsi of ♂ toothed within.....**occidentalis**, ♂ ♀.

Pubescence of body black, except apex of thorax and base of abdomen where it is bright ferruginous ; basal joint of hind tarsi (♂) simple..**tricolor**, ♂.

Pubescence of the body entirely black ; basal joint of the posterior tarsi (♂) simple.....**atrata**, ♂.

1. Anthophora Smithii, n. sp.

♂ ♀.—Form short and very robust ; black, opaque ; head, thorax, legs and first abdominal segment clothed with short, dense, pale yellowish pubescence, that on the thorax beneath hoary ; apical margin of

all the abdominal segments above, except the last, and in the ♂ the clypeus, the space on each side, labrum, spot on mandibles and scape in front, white; on each side of the clypeus there is a short sutural black line, and the labrum has a black dot on each side above. Wings hyaline, apical margin faintly dusky; basal joint of posterior tarsi of ♂ simple. Length 6—6½ lines.

Hab.—Colorado, (Mr. J. Ridings); Dakota Territory (Mr. Henry Ulke). (Coll. Am. Ent. Soc.) This fine species is dedicated to Frederick Smith, Esq., of the British Museum, the distinguished hymenopterist.

2. *Anthophora Walshii*, n. sp.

♂ ♀.—Differs from *Smithii* as follows:—The clypeus of the ♂ has two black spots at base, and the apical joint of the intermediate tarsi is ciliated laterally with black pubescence, giving the joint a dilated appearance; base of claws ferruginous; basal joint of posterior tarsi of ♂ simple. Length 6—6½ lines.

Hab.—Illinois, (Coll. Am. Ent. Soc.).

Although the ♂ of this species presents characters by which it can at once be distinguished from that of *Smithii*, yet the only perceptible difference between the other sex is the greater breadth of the abdomen of *Walshii*. Dedicated to Benj. D. Walsh, Esq., to whom the Society is indebted for a fine series of this elegant species.

3. *Anthophora marginata*.

Anthophora marginata, Smith, Brit. Mus. Cat. Hym. ii, p. 339.

Hab.—Orizaba, Mexico. (Coll. Am. Ent. Soc. from Prof. F. Sumichrast.) Three ♀ specimens.

4. *Anthophora californica*, n. sp.

♂.—Black; head, thorax, legs and basal segment of abdomen with dense ochraceous pubescence, short on the legs; clypeus, space on each side, transverse line above, large spot on mandibles, scape in front, and narrow apical margin of abdominal segments above, whitish or yellowish; wings hyaline, faintly dusky at apex; posterior legs very robust, apex of their tibiae with a stout, blunt spine within, and basal joint of their tarsi dilated, with a long flattened process within. Length 5 lines.

Hab.—California. (Coll. Am. Ent. Soc., from Baron R. Osten Sacken.)

5. *Anthophora montana*, n. sp.

♀.—Robust, black; sides of face, labrum, vertex, cheeks and occiput, clothed with a short, dense, pale ochraceous pubescence, slightly

mixed with black on the vertex; face and clypeus closely punctured; mandibles black, polished, fulvous before apex, beneath with a fringe of long whitish pubescence; thorax and first segment of abdomen above, clothed with a short and very dense yellowish pubescence, the pleura with less dense ochraceous pubescence; wings subhyaline, apical margin broadly dusky; legs black, outer side of tibiæ clothed with ochraceous pubescence, base of claws fulvous; apex of abdominal segments above, with a more or less distinct band of very short, pale ochraceous pile, more obvious in certain lights; tip of fifth segment with dense black pubescence; extreme sides of apical segments with whitish pubescence, also tufts of same on sides of apical ventral segments. Length $6\frac{1}{2}$ —7 lines.

Habitat.—Colorado, (Coll. Am. Ent. Soc., collected by Mr. James Ridings).

6. *Anthophora floridana*.

Anthophora floridana, Smith, Brit. Mus. Cat. Hym. ii, p. 339, ♂ ♀.

Hab.—"Florida" (Smith); Penn. Ills. (Coll. Am. Ent. Soc. ♀).

7. *Anthophora abrupta*.

Anthophora abrupta, Say, Bost. Jour. Nat. Hist. i, p. 409. ♂.

Anthophora sponosa, Smith, Brit. Mus. Cat. Hym. ii, p. 339. ♀.

Hab.—Mass., W. Va., Ills. (Coll. Am. Ent. Soc.). The basal segment of abdomen is sometimes entirely black.

8. *Anthophora ursina*, n. sp.

♂.—Robust, black; sides of face, vertex, cheeks, thorax, anterior femora beneath, and base of abdomen, clothed with a rather dense, long whitish pubescence; remainder of abdomen shining, with very short black pubescence; apex of clypeus, a triangular mark on each side, labrum, except two dots at base, and the scape in front, lemon-yellow; remainder of antennæ black; wings hyaline; middle joints of tarsi fulvous; intermediate tarsi long and slender, ciliated with long fulvous pubescence, base of first joint and the terminal joint black, the latter ciliated laterally with black pubescence, as in ♂ of *Walshii*; basal joint of posterior tarsi long and simple. Length $6\frac{1}{2}$ lines.

Hab.—West Virginia. (Ridings, Coll. Am. Ent. Soc.) A very distinct species.

9. *Anthophora bomboidea*.

Anthophora bomboidea, Kirby, Faun. Bor. Am. iv, p. 271, ♂.

Hab.—Mass., Conn., Penn., W. Va. (Coll. Am. Ent. Soc.). In the ♀, the pubescence of the head, except a slight mixture of pale hairs, and also a spot on the disk of the thorax, is black; the first and second abdominal segments always, and sometimes more or less of the third

segment, are clothed with short ochraceous pubescence; the remainder is black or brownish; the venter of ♂ has sometimes a scattered pale pubescence; and the basal joint of the posterior tarsi is dilated and toothed within. Length 6—6½ lines.

10. *Anthophora canadensis*, n. sp.

♀.—Much like *bomboides*, but differs by the pubescence of the thorax, and first and base of second abdominal segments above, being lemon-yellow; the pubescence of the vertex, occiput and cheeks is black. Length 5¾ lines.

Hab.—Ontario, Canada, (J. Pettit, Esq., Coll. Am. Ent. Soc.).

11. *Anthophora occidentalis*, n. sp.

♀.—Black; body clothed with a short, dense, yellow pubescence, shortest on abdomen, tip of latter dusky; legs with ochraceous pubescence; wings hyaline, apex dusky. Length 7¾ lines.

♂.—Clypeus, face on each side, labrum, except two black spots at base, spot on base of mandibles, and scape in front, lemon-yellow; most of tarsi fulvo-testaceous, basal joint of posterior pair acutely toothed within; tip of abdomen scarcely dusky; otherwise like the ♀.

Hab.—Colorado, (Ridings, Coll. Am. Ent. Soc.).

12. *Anthophora terminalis*, n. sp.

♀.—Form short and robust, black, shining; face, thorax and hind tibiae densely, and abdomen sparsely clothed with a pale ochraceous pubescence; vertex and disc of thorax with black pubescence; two apical segments of abdomen with bright fulvous pubescence; second, third and fourth segments with an apical fringe of pale ochraceous pubescence, more or less interrupted medially; apex of tarsi fulvous; head and thorax closely punctured, abdomen indistinctly so; wings subhyaline, apical margin faintly dusky. Length 5½ lines.

♂.—Less robust, with longer pubescence, which is rather hoary; clypeus, a spot on each side, and the labrum, yellow; basal joint of posterior tarsi long and simple; abdominal fasciae entire; two apical segments with short black pubescence; terminal segment deeply emarginate, and on each side of venter a tuft of whitish pubescence. Length 5 lines.

Hab.—Canada, Mass., Conn., Del., and Colorado, (Coll. Am. Ent. Soc.). Sometimes the pubescence is quite yellow, but generally very pale ochraceous.

13. *Anthophora tricolor*.

Anthophora tricolor, St. Farg. Hym. ii, p. 86 ♂.

Hab.—"Guadaloupe," (St. F.); Hayti, (Uhler, Coll. Am. Ent. Soc.)

14. *Anthophora atrata*.*Anthophora atrata*, Cresson, Proc. Ent. Soc. Phil. iv, p. 189, ♂.*Hab.*—Cuba, (Coll. Am. Ent. Soc.).*Species not recognized.**Anthophora frontata*, Say, Bost. Jour. Nat. Hist. i, p. 409.*Hab.*—"Louisiana." Near to *abrupta*, Say.*Anthophora fuscipennis*, Smith, Brit. Mus. Cat. Hym. ii, p. 338.*Hab.*—"North America." Allied to *atrata*, Cresson.*Anthophora domingensis*, St. Farg. Hym. ii, p. 32.*Hab.*—"St. Domingo."*Anthophora taurea*, Say, belongs to the genus *Melissodes*, a list of the species of which is now in preparation.

—o—

Notes on CUBAN HYMENOPTERA, with descriptions of new species.

BY E. T. CRESSON.

Sphex mandibularis, n. sp.

♀.—Deep black; broad anterior orbits, cheeks, pectus, narrow posterior margin of prothorax, three lines on mesothorax (the lateral ones confluent behind), tubercles, spot behind, stripe above each of the four posterior coxæ, and the post-scutellum, bright silvery; head thinly clothed with long black pubescence, whitish on the cheeks; mandibles flavo-testaceous, apical half black; pleura and metathorax with long, thin, whitish pubescence; sides of metathorax and coxæ with silvery pile, more obvious in certain lights; metathorax opaque, rounded above and behind, the surface not distinctly sculptured; tegulæ shining-black; wings smoky hyaline, with a brilliant violet reflection, apical margin broadly fuliginous; legs black, coxæ and femora with a changeable silvery pile; posterior tibiæ golden sericeous within; abdomen black, immaculate, smooth and polished. Length $11\frac{1}{2}$ lines

One specimen. (No. 531, Coll. Dr. J. Gundlach.)

Larrada luteipennis, n. sp.

♂.—Black, opaque, varied with a very fine changeable silvery pile, more obvious on face, sides and apex of metathorax and on abdomen; vertex with two broad, shallow, longitudinal impressions; antennæ nearly as long as head and thorax; metathorax finely sculptured, verge of posterior truncation carinate; tegulæ testaceous; wings yellow, apical half fuliginous; legs black, varied with silvery pile, spines whitish; abdomen short, ovate, first three segments above with a slightly interrupted silvery band at apex, apical segment also silvery. Length 4 lines.

Two specimens. (Coll. Am. Ent. Soc. and Dr. J. Gundlach.)